



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,448	03/09/2004	H. Thomas Graef	D-1217 R2	2402
28995	7590	09/09/2005	EXAMINER	
RALPH E. JOCKE			KUMAR, RAKESH	
walker & jocke LPA				
231 SOUTH BROADWAY			ART UNIT	
MEDINA, OH 44256			PAPER NUMBER	
			3654	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Me*

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,448	<b>Applicant(s)</b> GRAEF ET AL.	
	<b>Examiner</b> Rakesh Kumar	<b>Art Unit</b> 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,24 and 35-37 is/are rejected.
- 7) ☒ Claim(s) 2,4-23 and 25-34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
- 1: ☒ Certified copies of the priority documents have been received.
- 2: ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
- 3: ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/25/2005</u> | 6) <input type="checkbox"/> Other: ____  |

EA

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

Claim 1, 3, 24 and 35-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Furuki et al. (U.S. Patent Number 6,000,689) in view of Geib et al. (U.S. Patent Number 5,207,788).

1. Referring to claim 1, 3, 24, 35 and 37. Furuki discloses an automatic paper feeding apparatus consisting of a rotatable picking member 3 adapted to work in conjunction with a stripping member 4 to pick notes 1a generally one at a time from a stack of notes 1. The picking member 3 includes a first disk portion (construed to mean the disk portion that is located between the outer surface of the picking member and the surface that is in contact with the shaft of the picking member), which has a surface to induce a frictional grip to draw the initial note from the note stack 1. In the event that two notes are moved toward a separating portion 19 in between the picking member 3 and the stripping member 4, the stripping member 4 rotates in the opposite direction relative to the rotation of the picking member 3 and thus the contact frictional force between the two notes is overcome to separate the notes so that only a single note is allowed to move through the apparatus (Figure 9, Col 1 lines 20-40). The operative position of the picking member 3 in the apparatus is disposed transversely adjacent and in contact with the stripping member 4 as seen in Figure 9.

Furuki does not teach of disposing a high friction arcuate segment onto a picking member to prevent the deformation of the leading edge as the media is removed from the media stack.

Geib et al. teaches of disposing a high friction arcuate segment 13 on the external periphery of a roller member as seen in Figure 3. Geib discloses a higher projecting surface formed on the segment extends radially outward beyond the high friction arcuate portion of the segment. In addition Geib discloses that an arrangement of the protruding eccentric surfaces such as the "cheats" or the "indentations" on the periphery high friction arcuate surface can be altered and selectively placed on the surface in multiple configurations and sizes to prevent deformation of the leading edge of the notes as they are picked (Col 11 lines 5-12, 45, 65).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Furuki with the teachings of Geib to dispose a high friction arcuate segment on the pickup roller. This high friction arcuate segment can be arranged to contain a central projecting surface, such as higher central surface projection and a lower projection surface on the perimeter used to mount the segment to the disk portion of the roller. Thus, the lower surface around the high friction arcuate portion can be considered to be disposed in a transversely adjacent position to the high friction arcuate segment in a lateral direction as taught by Geib, it would have also been obvious to change the alignment of the projection so that they are aligned in an angular direction respective to the picking member. Thus, using a high friction arcuate segment on the pickup roller and using an angular arcuate projection pattern on the

outer surface, the deformation of the leading edges and the glossy friction burn marks over the body of the notes as they are removed by the pickup roller can be prevented.

2. Referring to claim 36. Regarding claim 36 (See Claim 1), Furuki discloses an apparatus using a pickup member 3 to deliver documents to a separating point 19 between the pickup member 3 and the stripping member 4.

Furuki does not teach of disposing a high friction arcuate segment onto a picking member to prevent the deformation of the leading edge as the media is removed from the media stack.

Geib discloses placing a high friction segment 13 onto a pickup member 12. The high friction segment extends a partial arc length along the picking direction from a forward edge bounding the high friction surface of the pickup member 12.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Furuki with the teachings of Geib and place the high friction arcuate segment on the pickup member that initially makes contact with the media stack (as described above in claim 1). Furthermore, it would have been obvious to orient the position of the high friction surface to be positioned by the forward bounding edge along the picking direction so that of the high friction surface extends adjacent to the bounding edge of the picking member. As a result a better contact can be maintained with the note stack and miss feeding of multiple notes can be prevented.

***Allowable Subject Matter***

3. Claim 2-23 and 25-34 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rakesh Kumar whose telephone number is (517) 272-8314. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3654

RK

*Kathy Matecki*

KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600